

Stroke, Post Stroke, Drinking Pills Āngōng Niúhuangwan?

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ARTICLE INFO

Article history:

Received Sep 21, 2022

Revised Sep 28, 2022

Accepted Oct 19, 2022

Keywords:

Stroke,
Pacsa stroke,
Taking pills āngōng
niúhuángwán

ABSTRACT

Introduction: Global Burden of Disease shows that globally, the risk of stroke has increased to 1 in 4 people. This underlies the World Stroke Organization to hold a stroke awareness campaign. Stroke is the second leading cause of death and the third leading cause of disability worldwide. According to the World Health Organization, stroke is a condition in which clinical signs develop rapidly in the form of focal and global neurologic deficits, which can be severe and last for 24 hours or more and cause death without any other apparent causes other than vascular. In addition, stroke is also a contributing factor to dementia and depression. **Purpose:** This study aims to reveal the importance of taking āngōng niúhuángwán pills during and after a stroke. **Method:** Conducted a literature review by searching through electronic databases Garuda, Pubmed, and Google Scholar and obtained three relevant research articles from 2011-2021 based on inclusion and exclusion criteria. **Result:** After being given āngōng niúhuángwán pills, it was found that there was an improvement in the quality of life in post-stroke patients. **Conclusion:** Taking āngōng niúhuángwán pills is effective in improving the quality of life in post-stroke patients.

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INTRODUCTION

Stroke is one of the most significant health problems in the world. In addition, in developed and developing countries, stroke is the third leading cause of death worldwide after coronary heart disease and cancer (Go et al., 2013). Stroke can be caused by pathological symptoms of cerebral blood vessels such as blockage of the lumen of blood vessels in the brain by thrombus or embolus, decreased blood flow to the brain, and rupture of cerebral blood vessels resulting in the impaired supply of oxygen and nutrients to the brain (Smeltzer & Bare, 2002).

Post-stroke patients requiring long-term care can increase the cost of maintenance and rehabilitation (Persson & Savulescu, 2012). The accumulation of conditions experienced by stroke patients can reduce the patient's quality of life. Most (78.9%) post-stroke patients have a low life rate due to their disability (Lumbantobing, 2010). Physical limitations have caused the patient to

experience limitations in carrying out activities which causes dependence on drugs on his family. A person suffering from a stroke cannot be cured completely; however, proper handling will lighten the burden on the sufferer, minimize disability, and reduce dependence on others. One of the essential components in long-term care is the patient's ability to treat and manage their illness (Self Care). In other terms, self-care is known as self-management (Basavanthappa, 2012).

The concept of self-management of stroke patients includes the capacity domain, namely increasing patient confidence, motivation, and ability, the part of confidence in interacting as an indicator of self-confidence and individual ability to communicate and respond to health workers in fulfilling self-management, the domain of strategy is as readiness and capability. Individuals play a self-management strategy, and the environment of guidance by health professionals is an indicator of trust in health workers' information to implement self-management (Boger, 2014). High self-management of stroke patients will impact a better quality of life.

Self-management, in general, is self-management related to life and illness, disease management related to treatment and care, and symptom management. So that when applied to stroke patients the aspect of managing the life of stroke patients, they must maintain food according to their disease, should not consume foods high in salt because they have a history of hypertension, and should not be high cholesterol because they have atherosclerosis in the aspect of symptom management to overcome the remaining symptoms such as paralysis, motor disorders, and cognitive disorders. In the part of treatment and care, patients must carry out control for the initial stage, and it is recommended to control once a week and then have to control once a month so that their health condition is monitored. A stroke occurs when a blood vessel in the brain is blocked or ruptures, resulting in part of the brain not getting the blood supply that carries the oxygen it needs, resulting in cell/tissue death.

Data from the World Stroke Organization shows that every year there are 13.7 million new stroke cases, and about 5.5 million deaths occur. Approximately 70% of strokes and 87% of deaths and disabilities due to stroke occur in low- and middle-income countries. Over the last four decades, the incidence of stroke in low- and middle-income countries has more than doubled. Meanwhile, the incidence of stroke decreased by 42% in high-income countries. Over the last 15 years, strokes have caused more deaths than cardiocerebrovascular diseases, classified as catastrophic diseases because they have broad economic and social impacts. Stroke can cause permanent disability, which can affect the sufferer's productivity.

Besides having an economic and social impact on society, stroke also adds to the burden of health financing. According to the Social Security Administration (BPJS) for Health, there was an increase in the total funding for catastrophic disease services in the National Health Insurance (JKN) from 2016 to 2018 of around 4 trillion rupiahs. Stroke, one of the diseases with the highest costs, cost health services IDR 2.56 trillion in 2018. The number of stroke clients increases every year, so the cost of health services is rising. Stroke is a catastrophic disease that needs serious attention because it significantly impacts the country's socioeconomic development.

The prevalence of non-communicable diseases such as cancer, chronic kidney disease, diabetes mellitus, hypertension, and stroke, based on the results of the 2019 National Health Survey (Rikesdas), increased compared to 2013. The prevalence of cancer increased from 1.4% in 2013 to 1.8% in 2018, chronic kidney disease from 2 % to 3.8%, diabetes mellitus from 6.9% to 8.5%, hypertension from 25.8% to 34.1%, and stroke from 7% to 10.9%. Nationally, the prevalence of stroke in Indonesia in 2018, based on doctors' diagnoses in the population aged ≥ 15 years, was 10.9%, or an estimated 2,120,362 people.

Based on the age group, it can be seen that the incidence of stroke occurs more in the 55-64 year age group (33.3%) and the lowest proportion of stroke sufferers is in the 15-24 year age group. Men have almost the same ratio of stroke events. Most of the population affected by stroke had an elementary school education (29.5%). This is the same as the characteristics of other non-communicable diseases. Most of the sufferers

In the world of traditional medicine, traditional Chinese medicine/herbs have the "three treasures of first aid for heat illness," namely āngōng niúhuángwán z xuě dān / 紫雪丹、 z hìb odān / 至宝丹; The āngōng niúhuáng Pill is also one of the three secret recipes of traditional Chinese medicine, the other two being yúnnán báiyào / 云南白药 and Pien Tze Huang / 片子黄. In the general public, there are statements such as: "After a stroke, take āngōng niúhuáng pills, there is a.

RESEARCH METHOD

The methodological approach used in this study is a literature review approach which aims to determine the various types of evidence (quantitative and qualitative) available on a topic and present the evidence visually. The data collected in this study were sourced from the research database, year of publication, and inclusion and exclusion criteria. The source of data in this scientific paper (literature review) was obtained through the search results of articles about stroke, post-stroke, taking pills āngōng niúhuángwán ? by using three types of electronic databases, namely: Pubmed, Garuda, and Google Scholar.

RESULTS AND DISCUSSIONS

Clinical Use of Pill āngōng niúhuáng for Stroke

Clinical effects of modified āngōng niúhuáng Pills in the treatment of acute cerebral hemorrhage in clients with brain injury

Doctor D ng Fúzhù [¹] observed the clinical effect of the modified āngōng niúhuáng Pill in the treatment of acute brain hemorrhage clients with brain injury. Methods: Thirty-eight clients with acute cerebral hemorrhage with brain injury were randomly assigned to an observation group and a control group, each group being 19 cases. The control group received conventional western medicine treatment, and the observation group based on the control group took the modified āngōng niúhuáng Pill based on the control group. The treatment effects and adverse reactions of the two groups were compared. Results: The total effective rate of the observation group was 78.95% higher than the control group, 47.37%, and the difference was statistically significant ($P < 0.05$). The incidence of adverse events in the observation group was 10.53% lower than 42.11% in the control group, and the difference was statistically significant ($P < 0.05$). Conclusion: Western medicine in the treatment of acute brain hemorrhage clients with brain injury combined with āngōng niúhuáng pills, the healing effect is better.

Clinical Observation of āngōng niúhuáng pills in the treatment of elderly clients with massive cerebral infarction

Zhāng Qiáng's doctor, Sūn Xīn [2], observed the curative effect of the āngōng niúhuáng Pill in an elderly client with massive cerebral infarction. Methods: A total of 76 clients with massive cerebral infarction admitted to the Critical Care Medicine Department of Longhua Hospital from July 2016 to October 2019 were selected and divided into an observation and a control group, with 38 cases in each group. The western medicine treatment plan was formulated according to the guidelines for the treatment of massive cerebral infarction in both groups, and the additional observation group was treated with āngōng niúhuáng pills. The course of medicine in the two groups was 28 days. GCS scores (Glasgow Coma Scale), NIHSS (National Institutes of Health Stroke Scale), and TCM syndrome scores were observed and compared between the two groups at admission and 14 days and 28 days after the intervention. (neuronal enolase) and protein content of S-100b. Results The curative effect of the observation group was generally better than that of the control group ($P < 0.05$). On the 28th day of treatment, the GCS scores of both groups were < 0.05); on the 28th day of treatment, the NIHSS scores, TCM syndrome scores, serum NSE levels, and serum S-100b protein in both groups all decreased ($P < 0.05$), and the observation group fell significantly more than the

control group ($P < 0.05$).). Results: The āngōng niúhuáng Pill can increase the awareness of elderly clients with massive cerebral infarction, reduce central nerve cell damage, and improve clinical symptoms.

Clinical efficacy analysis of modified āngōng niúhuáng pills in the treatment of acute cerebral hemorrhage with brain injury and their effect on brain natriuretic peptide levels

Doctor Wáng Hóngwěi [3] explored the clinical efficacy of āngōng niúhuáng pills in the treatment of clients with acute cerebral hemorrhage with brain injury and their effect on brain natriuretic peptide levels. Methods: A total of 140 clients with acute cerebral hemorrhage in the hospital from October 2017 to October 2019 were selected and randomly assigned to an observation group (modified āngōng niúhuáng pills) and a control group (conventional medicine) with 70 clients each. The treatment effects of the two groups were compared. Results: Compared with the control group, the adequate total number (97.14%) of the observation group was higher, and the difference was statistically significant ($P < 0.05$). After treatment, the individual symptom scores of the observation group were lower than the control group, and the difference was statistically significant ($\chi^2 = 9.035$, $P < 0.05$); and after treatment, brain natriuretic peptide levels (80.54 ± 5.75) pg/mL and GOS scores (4.58 ± 1.92) in the observation group were higher than in the control group, and the difference was statistically significant ($t = 9.765$, 3.897 , $P < 0.05$); there was no significant difference in the incidence of side effects between the two groups ($\chi^2 = 0.431$, $P > 0.05$). Conclusion: The application of āngōng niúhuáng pills in the treatment of acute brain hemorrhage clients with brain injury can increase the therapeutic effect, effectively improve the client's clinical symptoms, and reduce the incidence of side effects.

Clinical effects of āngōng niúhuáng pills combined with conventional therapy on clients with acute cerebral infarction in the recovery stage

Doctor Zhèng Fāngkūn[4] and colleagues conducted a study to determine the clinical effect of āngōng niúhuáng pills combined with conventional therapy on clients with acute cerebral infarction in the recovery stage. Methods: 100 clients were randomly divided into a control group and an observation group; each group was 50 cases, the control group was given routine medication (aspirin, atorvastatin, rehabilitation exercise training), and the observation group was based on the control group plus was given āngōng niúhuáng pills, the treatment process is 14 days. Clinical effects were detected based on the Fugl-Meyer score, NIHSS score, blood flow index (Vm, PI), vascular endothelial cytokines (NO, ET-1, AngII), and the incidence of adverse reactions. Results: The total effective rate in the observation group was higher than the control group ($P < 0.05$). After treatment, Fugl-Meyer, Vm, and NO scores increased in both groups ($P < 0.05$), while the NIHSS, PI, ET-1, and AngII scores decreased ($P < 0.05$), and the observation group was more significant ($P < 0.05$). $P < 0.05$). There were no apparent adverse reactions in either group. Conclusion: āngōng niúhuáng pills in combination with conventional therapy can improve limb function and cerebral blood perfusion in clients with acute cerebral infarction in the convalescent stage, and the mechanism may be related to the improvement of vascular endothelial function.

Clinical effects of āngōng niúhuáng pills combined with butylphthalide in the treatment of clients with severe cerebral infarction

Doctor Zhèng Jiànwèi [5] analyzed the effect of the combined application of āngōng niúhuáng pills and butylphthalide on clients with severe cerebral infarction. Methods: 86 clients with severe cerebral infarction admitted to the Wucheng County People's Hospital from January 2019 to October 2020 were selected as research objects and divided into two groups by the random number table method, with 43 cases each. Based on conventional treatment, the control group was treated with butylphthalide, and the observation group was supplemented with āngōng niúhuáng pills based on the control group. Clinical efficacy, National Institutes of Health Stroke Scale (NIHSS) and Serum Neuronal Enolase (NSE) scores, Glasgow Coma Scale scores (GCS), matrix metalloproteinase-13 (MMP-13) levels. Results: After treatment, the GCS score of the observation group was higher than

that of the control group, and the serum NSE, MMP-13, and NIHSS scores were lower than the control group, and the difference was statistically significant ($P < 0.05$). The total effective rate of treatment in the observation group was higher than in the control group, and the difference was statistically significant ($P < 0.05$). Conclusion: Clinical efficacy of āngōng niúhuáng pills combined with definite butylphthalide, which can effectively relieve the client's condition, reduce NSE and MMP-13 levels, and accelerate the recovery of the client's neurological function.

Effects of āngōng niúhuáng pills combined with soft duct puncture and drainage on oxidative stress and endothelial function in clients with hypertensive intracerebral hemorrhage

Doctor Péngguóhóng [6] and colleagues conducted a study to determine the effect of āngōng niúhuáng pills combined with soft tract puncture and drainage on oxidative stress and endothelial function in clients with hypertensive intracerebral hemorrhage. Methods A total of 84 cases of intracerebral hemorrhage hypertension treated from April 2018 to January 2020 were selected. They were divided into an observation and a control group according to treatment methods, 42 cases each. The observation group was given āngōng niúhuáng pills combined with soft line puncture and drainage, and the control group was assigned faint line puncture and drainage. Oxidative stress, endothelial function, neurological function, clinical-related indices, and adverse reactions during treatment were observed and compared in both groups before and after treatment. Results Before treatment, there was no significant difference in oxidative stress, endothelial function, neurological function, and clinically related index between the two groups ($P > 0.05$). The oxidase levels, vascular endothelial growth factor, and nerve growth factor were higher than the control group. , and serum levels of malondialdehyde and endothelin-2 were lower than the control group; National Institutes of Health Stroke Scale scores, intracranial hematoma volume, intracranial pressure, and TCM symptom scores were lower or lower than those in controls. Group, and the Glasgow Coma Scale and Barthel Index scores were higher than the control group ($P < 0.01$). During the treatment period, there was no significant difference in the incidence of adverse events between the two groups ($P > 0.05$). Conclusion āngōng niúhuáng pills combined with soft duct puncture and drainage can improve oxidative stress and endothelial function in clients with hypertensive intracerebral hemorrhage and promote restoration of neurological function with reasonable safety.

Discussion

a. Āngōng Niúhuáng Pills

āngōng niúhuáng pill comes from the book *wēnbìng tiáobiàn* by doctor Wú Jūtōng in the Qing Dynasty. The recipe consists of *niúhuáng* / 牛黄、 *xìjiǎo* / 犀角、 *shèxiāng* / 麝香、 *zhēnzhū* / 珍珠、 *zhūshā* / 朱砂、 *xiónguáng* / 雄黄、 *huánglián* / 黄连、 *huángqín* / 黄芩、 *zhīzi* / 栀子、 *yùjīn* / 郁金、 *bīngpiàn* / 冰片和 others, have the properties of clearing heat and detoxification clearing *tán*/phlegm and opening the senses/ *qiào* .

As one of the " *Three Treasures of Cold Opening* " for febrile illnesses, *āngōng niúhuáng pills* have always been considered the first choice for treating acute and critical diseases, playing a significant role in the treatment of high fever coma delirium caused by heat-infected pathogens pericardium/lining of the heart, as well as various diseases such as brain injury brain disease , hepatic coma, and severe pneumonia in children.

In the book *wēnbìng tiáobiàn*, *āngōng niúhuáng pills* are widely used in the treatment of *fēngwēn* disease / 风湿、 *wēndú* / 温毒、 *shūwēn* / 暑温、 *wēnnüè* / 温疟、 *shūwēn* / 湿温 and other diseases, as in the *shàngjiāo* chapter of *fēngwēn* / 风湿 verse 17: "Pathogens enter the pericardium/membrane of the heart, tongue movement is slow, speech is slurred, and the feet and hands are freezing, and *niúhuáng pills* are the main choice," *shàngjiāo* chapter of the disease *wēndú* / 温毒 verse 21: " Disease *wēndú*/温毒 with symptoms of coma and delirium, first with pills *āngōng niúhuáng* and *z xuědān*, " *zhōngjiāo* chapter of

fēngwēn disease / 风温 verse 5: " *Yangming warm illness, no sweating, difficulty urinating, and delirium, take niúhuáng pills first; if there is no excretion, then drink the formula diàowèi chéngqì.* "

It can be seen from the original text that *āngōng niúhuáng pills* are especially suitable for the treatment of the syndromes of "pathogens enter the pericardium/heart lining" and "heat covers the inner sensory openings," such as trying fever with symptoms of coma and delirium caused by excessive sweating; Pathogens enter the pericardium/lining of the heart, slow tongue movements, slurred speech, and freezing feet and hands; *shīdú* / 湿毒 disease with symptoms of coma and delirium in; *shūwēn* / 暑温 *jueyin* hand disease, with signs of dark thoughts, agitation from time to time; *wēndú* / 温毒 *yangming* disease with symptoms of fever. The main syndrome symptoms are delirium coma, slow tongue movement, slurred speech, and cold extremities in the hands and feet. Signs of the tongue can be seen: dark red tongue with a little coating/membrane, red tongue with yellow center, cloudy tongue, and heavy breathing. In clinical practice, *āngōng niúhuáng pills* can be used when the above symptoms are seen in stroke clients.

b. Syndrome Identification

zhòngfēng / 中风: is a disease caused by an imbalance of *yīn* and *yáng*, *qì* and blood running backward, rising upwards, attacking the brain and resulting in having the main symptoms of sudden fainting unconsciousness hemiplegia sloping mouth and tongue; or no sudden fainting, only hemiplegia mouth and tongue tilted speech is not fluent、partial numbness. *zhòngfēng* / 中风 is distinguished as *zhòngzàngf* / 中脏腑 and *zhōngjīngluò* / 中经络.

- a) *zhōngjīngluò* / 中经络: no fainting, but only hemiplegia mouth and tongue slanted speech is not eloquent. The location of the disease is superficial, and the condition of the disease is relatively mild.
- b) *zhòngzàngf* / 中脏腑: sudden fainting unconscious or in a daze, confused, accompanied by paralysis, slanted mouth, and tongue. The location of the internal disease and the condition of the illness is profound/severe.

zhòngzàngf / 中脏腑 is further divided into *bìzhèng* / 闭证 (closed syndrome) and *tuōzhèng* / 脱证 (detached syndrome).

- a) *bìzhèng* / 闭证 (closed syndrome): is caused by a closed pathogen inside, with trismus unable to open the mouth, both hands gripping tightly, limbs are cramped and stiff, do not urinate and defecate. Based on the manifestations of heat, it is divided into *yángbì* / 阳闭 (closed) and *yīnbì* / 阴闭 (closed *yn*) syndromes.
- b) *tuōzhèng* / 脱证 (disconnected syndrome): is a result of being released outside, with eyes closed and mouth open slight snoring, open arms and weak legs unable to control urination and defecation, sweating and cold limbs, small pulse smooth and tend not to be palpable.

bìzhèng (closed syndrome) is more common in sudden attacks of *zhòngfēng* / 中风, the type of disease is excess as the main; *tuōzhèng* (detached syndrome) is generally a change from *bìzhèng* (closed syndrome) that worsens, the kind of disease is a deficiency as the main, the disease condition is critical, and the prognosis is dangerous.

- a) **Yángbì/阳闭 (closed) syndrome**, the symptoms are red facial color and fever, heavy breath and lousy breath, restlessness and restlessness yellow and dirty tongue membrane smooth and fast string pulse.

b) **yīnbì / 阴闭 (yn closed) syndrome**, the symptoms are dark face and lips lying calm and not restless, cold limbs, a lot of phlegm and saliva, white and dirty tongue membrane, smooth and slow sinking pulse.

c. Mechanism of treatment of pills āngōng niúhuáng

The key to the treatment of the *āngōng niúhuáng Pill* is that it has the function of clearing heat and detoxifying, removing cloudiness, and opening the senses: The *āngōng niúhuáng Pill* is the leading prescription of the cold formula for resuscitation, has a good function of clearing heat and neutralizing toxins and expelling fire expels the dirty and cloudy and opens the senses. This formula was created by doctor Wú Jūtōng based on a summary of the use of the *wànshì niúhuáng qīngxīn pill* (Wan 's Niuhuang Qingxin Pill) (*niúhuáng / 牛黄*、*zhūshā / 朱砂*、*huánglián / 黄连*、*huángqín / 黄芩*、*zhīzi / 栀子*、*yùjīn / 郁金*fāng) and *j odān* (*shēngwūxiǎo / 生乌犀角*、*zhūshā / 朱砂*、*xiónghuáng / 雄黄*、*shēngdàimàoxiè / 生玳瑁屑*、*h pò / 琥珀*、*shèxiāng / 麝香*、*lóngnǎo / 龙脑*、*yínbó / 银箔*、*niúhuáng / 牛黄*ānxiāng / 安息香) by doctor Yè Tiānshì . The *Pill wànshì niúhuáng qīngxīn* has the effect of removing heat and neutralizing potent poisons, but the impact of extending the reasons is slightly weak; *j fāng zhìb odān* has excellent sense-opening properties, the property of clearing heat and dispelling fire is a little bland. Based on doctor Yè Tiānshì's experience, doctor Wú Jūtōng skillfully combines the two by addition and subtraction to make *āngōng niúhuáng pills*. Wú Jūtōng's ingenious innovation makes the new formula of the *āngōng niúhuáng Pill* not only possess the properties of the *wànshì niúhuáng qīngxīn Pill* to clear heat 、 to dispel fire and neutralize toxins, but at the same time, it also has the properties of *j fāng zhìb odān* to expel the dirty and cloudy and open the senses.

Composition of the *āngōng niúhuáng Pill* is an essential weapon for curing disease and the characteristics of the *āngōng niúhuáng pill formula*, doctor Wú Jūtōng gave an excellent explanation, saying that " *This formula has an aromatic to expel the dirty and cloudy and thereby stimulates the senses, and salty and cold protects the water kidneys and protects the heart, bitter cold dispels fire in the fu organs and the heart.*"

d. Composition of āngōng niúhuáng . pills

jūnyào / 君药: *niúhuáng / 牛黄*、*shèxiāng / 麝香*. *niúhuáng / 牛黄* bitter and cold in taste, has heart cleansing and detoxifying properties 、 relieves wind and calms removes phlegm, and opens the senses; *shèxiāng / 麝香* is warm and runs through the twelve meridians, excellent at opening the senses and awakening shén. *shèxiāng / 麝香* dan *niúhuáng / 牛黄* one warm and one cold, and complement each other. Used together, it has heat-clearing and sense-opening properties, as it is specially designed for clients with severe coma in heat illness due to heat pathogens entering the pericardium/heart membrane; this is the main characteristic of *āngōng niúhuáng pills*.

chényào / 臣药: *xījiǎo / 犀角* neutralizes all poisons and expels pathogenic qì; bitter and cold from *huánglián / 黄连*、*huángqín / 黄芩*、*zhīzi / 栀子* helps *jūnyào*, adds properties to clear heat and dispels fire cools the blood and neutralizes toxins remove phlegm, make fire pathogens follow aromatic herbs dispersed disappear.

Zu yào / 佐药: *zhūshā / 朱砂*、*zhēnzhū / 珍珠* has the properties of calming the mind and opening the senses; *yùjīn / 郁金* moves the qì and calms the heart; *xiónghuáng / 雄黄* detoxify and remove impurities; *bīngpiàn / 冰片* herbal aromatic and open the reasons, helps *jūnyào* strengthen calms the heart relieves spasms calms shén.

All of the above herbs, with the addition of honey, are formed into pills; in addition to providing shape, they also have the property of harmonizing the stomach, thereby preventing excessive bitterness and cold from injuring the stomach.

e. Stroke syndrome can be given āngōng niúhuáng pills

- a) **Fēnghuǒ bìqiào / 风火闭窍 syndrome:** sudden fainting, unconsciousness, hemiplegia, limb spasms or stiffness, tilted mouth and tongue. Crossed or straight eyes, red face, and red eyes. Closed mouth, stiff neck, tightly clenched hands, and even twitching/convulsions. The tongue is red or dark red; the language is dry or charred black, and the pulse is stringy and fast.
- b) **Tánhuǒ bìqiào / 痰火闭窍:** sudden fainting, unconsciousness, hemiplegia, limb spasm or stiffness. Snoring and there is phlegm and wheezing sound, red face, red eyes, or looks fierce, straight eyes, back of the neck and body heat, restlessness and restlessness, constipation. The tongue is red or dark red, and the language is dirty yellow or yellow thick and dry – smooth pulse, fast, and powerful.

f. Clinical Research on āngōng niúhuáng pills according to Traditional Chinese Medicine Clinical Observation of āngōng niúhuáng pill with Retention Enema in Treating zhòngfēng /stroke ~ zhōngzàngf / 中脏腑

Doctor Liú iqún ^[7] and colleagues observed the clinical efficacy and mechanism of applying āngōng niúhuáng pills with the retention enema method in the treatment of severe cerebral hemorrhage (i.e., zhòngfēng / 中风 ~ zhōngzàngf / 中脏腑 which was diagnosed according to Traditional Chinese Medicine) based on the treatment routine western medicine. Methods: 76 clients were randomly divided into the observation group and the control group. Both groups were given conventional western treatment for symptomatic treatment, the control group was assigned mannitol infusion, and the observation group was given āngōng niúhuáng pills with retention enema. Results: The increase in the curative effect and the degree of neurological deficit in the observation group was better than in the control group. Conclusion: the use of Pill āngōng niúhuáng with retention enema for zhòngfēng / 中风 ~ zhōngzàngf / 中脏腑 has a better effect on awakening the brain and opening the senses clearing heat and expelling phlegm, calming spasms, etc., which significantly enhances the impact curative and reduce mortality.

i. Exploring the therapeutic effect of āngōng niúhuáng Pills in the treatment of zhòngfēng /stroke ~ zhōngzàngf / 中脏腑 with the identification of TCM syndrome

Doctor Zhāng Xi oyáng [8] analyzed the effect of identifying TCM syndrome from āngōng niúhuáng pills in the treatment of zhòngfēng /stroke ~ zhōngzàngf / 中脏腑. Methods: Fifty cases of stroke clients with viscera were randomly divided into western medicine and traditional Chinese medicine groups, each with 25 points. The treatment of the west group was treated with conventional methods, and the traditional Chinese medicine group was treated with āngōng niúhuáng pills by retention enema method based on the medicine of the Western group. Results: In the traditional Chinese medicine group, 2 cases (8%) were cured, 10 cases (40%) were very effective, 9 cases (36%) were compelling, 2 points (8%) were ineffective, and two patients (8%) were effective.) worsened. The total effective rate is 84%.%; The conventional treatment group recovered in 1 case (4%), very effective in 7 cases (28%), effective in 6 cases (24%), ineffective in 6 patients (24%), and worsened in 5 patients (20 %), with a total effective rate of 56%; the actual effective rate of the traditional Chinese medicine group was higher than that of the conventional medicine group, and the difference was statistically significant (P<0.05). Conclusion: For the treatment of zhòngfēng / 中风 ~ zhōngzàngf / 中脏腑, based on conventional mannitol infusion, adding āngōng niúhuáng pills

with retention enema method can effectively enhance the therapeutic effect, reduce the client's neurological deficit, and improve the client's future prognosis – life and quality of life.

g. Observation of the Curative Effect of āngōng niúhuáng pills in treating 32 cases of zhōngfēng /Acute Stroke

Doctor Xú Gu ngxíá [9] conducted a study to observe the clinical efficacy of the āngōng niúhuáng Pill in the treatment of acute zhōngfēng /Stroke, to explore its clinical value, and to provide effective drugs for the clinical treatment of acute zhōngfēng /Stroke. Methods: A total of 64 sensitive zhōngfēng /stroke clients treated in this hospital from May 2010 to March 2012 were selected and randomly divided into two groups, namely a control group of 32 clients who received conventional comprehensive rescue treatment and an observation group of 32 clients. Who received traditional complete rescue therapy were given āngōng niúhuáng pills, and the clinical efficacy of two groups of clients after treatment was observed. Results: After treatment, there were 32 cases in the treatment group, 19 patients (59.38%) were significantly effective, and the total effectiveness was 90.63%; 32 cases in the control group were especially effective, 13 cases (40.63%), and the real effective rate was 28.12%. Conclusion: The effect of āngōng niúhuáng pills combined with conventional comprehensive rescue measures in the treatment of acute zhōngfēng /stroke is significantly better than traditional complete rescue, with fewer side effects and safety. Therefore, the Pill āngōng niúhuáng method in the treatment of acute zhōngfēng /stroke is feasible to be applied clinically.

h. Observation of the curative effect of āngōng niúhuáng pills combined with the formula tngf huàtán in the treatment of 40 cases of zhōngfēng /中風yángbì /阳闭syndrome

Doctor Lín Róngfāng [10] in this paper presents the results of clinical observations showing that under the treatment of a comprehensive program of conventional western medicine, the initial addition of āngōng niúhuáng pills combined with the tngf huàtán formula in the treatment of zhōngfēng /中風yángbì /阳闭syndrome with tánrè f symptoms shí /痰热腑实, improvement in clinical symptoms and impaired consciousness was significantly better than the control group ($P < 0.01$ or $P < 0.05$), and during clinical treatment, routine monitoring of blood, urine, stool, heart, brain, and renal function in the observation group were performed. No adverse reactions were found, which is worthy of clinical promotion.

i. āngōng niúhuáng pills combined with acupuncture in the treatment of acute zhōngfēng / ischemic stroke

Doctor Chén Y ngxíá [11] investigated the clinical efficacy of āngōng niúhuáng pills combined with acupuncture in the treatment of zhōngfēng / acute ischemic stroke. Methods: Fifty clients with acute zhōngfēng / ischemic stroke who were admitted to our hospital from July 2005 to June 2010 were selected. All cases were randomly assigned to an observation and a control group, 25 points each. The patients in both groups were treated with conventional comprehensive salvage therapy of traditional treatment, and the cases in the observation group were given additional āngōng niúhuáng pills combined with acupuncture. The clinical curative effect of the patients in both groups was observed. Results: Total effectiveness was 92% in the treatment group and 68% in the control group. The observation group was superior to the control group in controlling seizures and fever ($P < 0.05$). Conclusion: The āngōng niúhuáng Pill combined with acupuncture in the treatment of zhōngfēng / acute ischemic stroke clients has a significant curative effect and deserves a clinical promotion.

j. Clinical Observation in 34 Cases of zhōngfēng / stroke treated by Pill āngōng niúhuáng

Doctor Xíng Fēnglǐ [12] and colleagues observed the clinical efficacy of the āngōng niúhuáng Pill in the treatment of impaired consciousness, seizures, and fever in zhōngfēng / stroke clients. Methods: 54 cases of zhōngfēng / acute stroke clients were randomly divided into two groups, 34 compartments in the monitoring group, administration of āngōng niúhuáng pills based on conventional comprehensive salvage treatment, and 20 patients in the control group receiving

traditional comprehensive salvage treatment. Results: The observation group was better than the control group in increasing awareness and controlling seizures ($P < 0.05$), and the observation group was also better than the control group in maintaining body temperature ($P < 0.01$). Conclusion: The āngōng niúhuáng Pill is effective in treating acute zhòngfēng / stroke.

k. Things to pay attention to when using āngōng niúhuáng. pills

- a) The composition of this Pill is cold and is included in the herbal "open cold / *liángkǎi*." This Pill is contraindicated for clients with cold syndrome or profuse sweating and extreme cold of all four limbs (hands and feet).
- b) This Pill is an emergency treatment herb and cannot be used as a preventive pill. Otherwise, it can cause cranial nerve damage, worsen the cardiovascular and cerebrovascular disease, and even cause a stroke. While taking this Pill, one must understand the process of the course of treatment, and the Pill should be discontinued when it is effective.
- c) Adults take one Pill once a day, 1/4 pill for children aged three years, and 1/2 pill for ages 4~6 years. Generally, bringing it within 0.5 to 2 hours after a meal is the best time for absorption. Before taking it, remove the wax shell and plastic round shell and plastic, dissolve in warm water, drink, do not swallow the pill whole, and take capsules as advised by Nakestrad Intercontinental. For those who have difficulty in oral administration, such as high fever, coma, stroke, etc., it should be given through nasal feeding. If you have chills in your limbs, pale skin, persistent cold sweats, and a weak pulse, it should be considered to stop taking the Pill. The golden time to take this Pill is 3.5 hours after the stroke. Consuming it during this period can effectively protect the brain and reduce the harm caused by post-stroke symptoms.
- d) This Pill contains *zhūshā* / cinnabar *xiónghuáng* /realgar; due to the presence of toxic components such as mercury sulfide and arsenic sulfide, not suitable for long-term use. And because it contains *shèxiāng* /musk, pregnant women should use it cautiously. Otherwise, there is a possibility of abortion. Athletes are prohibited from taking this Pill.
- e) *xiónghuáng* /realgar in āngōng niúhuáng Pills can produce arsenic sulfide when it encounters nitrite or iron salts (ferrous sulfate, ferrous gluconate 、 ferrous fumarate), thereby reducing the curative effect of āngōng niúhuáng Pills, and increasing its toxicity. Therefore, it cannot be taken with drugs containing nitrate, iron nitrate, and sulfate in clinical practice.

CONCLUSION

Expensive medicine is not necessarily the same as good medicine Most people wrongly believe: "The more expensive the drug, the better." This can be said to be a big mistake. The price of a drug is mainly determined by its raw materials and the research and development process. Some medicines are expensive because raw materials are scarce, and there is no way to mass produce them, so this factor makes them expensive. For example, āngōng niúhuáng pills are because critical ingredients such as niúhuáng /牛黄、 xījiǎo /犀角、 shèxiāng /麝香 and other raw materials are rare. The price of their products is naturally high, but that does not mean that these medicines are "medicines." the good one." The fact may be the opposite. For most patients, the determining factor for the "good" and "bad" drug is not price but "whether it fits the syndrome or not." If the medicine does not match the syndrome, then the expensive treatment is also useless, and there may be side effects/toxicity; As long as the drug is used according to the syndrome, even common drugs (not expensive drugs) can solve big problems. Is Good Medicine, But Not For Everyone The recipe for āngōng niúhuáng pills comes from the book wēnbìng tiáobiàn by the famous doctor Wú Jūtōng of the Qing Dynasty. It is one of the essential medicines for treating "warm sickness" in traditional Chinese medicine. Its

main effect is to clear heat and detoxify, calm the soul and open the senses. On the outer layer, there is a skinny layer of gold that serves to soothe the soul and is used to treat high fever and symptoms of restlessness, can't calm down, fainting, speech is not clear, as well as stroke, coma, and seizures in children, including the hot stuffy pathogen syndrome inside .

ACKNOWLEDGEMENTS

- Basavanthappa, B. T. (2012). *Nursing Education Japee brother's medical publisher (p) LTD*. nd.
- Go, A. S., Mozaffarian, D., Roger, V. L., Benjamin, E. J., Berry, J. D., Borden, W. B., Bravata, D. M., Dai, S., Ford, E. S., & Fox, C. S. (2013). Heart disease and stroke statistics – 2013 update: a report from the American Heart Association. *Circulation*, 127(1), e6–e245.
- Lumbantobing, D. N. (2010). Four new species of the *Rasbora trifasciata*-group (Teleostei: Cyprinidae) from Northwestern Sumatra, Indonesia. *Copeia*, 2010(4), 644–670.
- Persson, I., & Savulescu, J. (2012). *Unfit for the future: The need for moral enhancement*. OUP Oxford.
- Smeltzer, S. C., & Bare, B. G. (2002). *Buku Ajar Keperawatan Medikal-Bedah, Vol. 3*.
- Chen, Y. (2011). 安宫牛黄丸结合针灸治疗缺血性中风急性期. *China Health Industry*, 22 (2), 101 .
- Dong Fu-zhu. (2021). Clinical effect of modified Angong Niu Huang Pills in the treatment of acute cerebral hemorrhage patients with brain injury. *Chin J Mod Drug Appl*, 15 (23), 178-180 .
- Lin, R. (2013). 安宫牛黄丸联合通腑化痰汤治疗中风阳闭证40例疗效观察. *内蒙古中医药*, 33 (3), 1-2 .
- Liu, A. _ and Li, Y. (2006). 安宫牛黄丸保留灌肠治疗中风-中脏腑临床观察. *JETCM*, 15 (1), 5-36 .
- Peng, G. _ and Yao, C. _ (2021). Effects of Angong Niu Huang Pill Combined with Soft Channel Punctur Drainage on Oxipative Stress and Endothelial Function in Treetment of Patient] with Hypertensive Cerebral Hemorrhage. *Clinical Misdiagnosis & Mistherapy*, 34 (11), 35-39 .
- Wang Hong-wei. (2021). Try to Analyze the Clinical Effect of Angong Niu Huang Pills in the Treatment of Acute Cerebral Hemorrhage Brain Injury and Its Influence on Brain Natriuretic Peptide Levels . *System Medicine*, 6 (13), 43-45 .
- Xing, F. _ and Li, Q. (2005). Therapeutic effects of Angongniu Huang pill on 34 patients with cerebral stroke. *Hebei J TCM*, 27 (1), 13-14 .
- Xu, G. (2012). 安宫牛黄丸治疗急性中风32例疗效观察. *China Health Industry*, 35 (2), 174 .
- Zhang, Q. _ and Sun, X. (2021). Clinical Observation of Angong Niu Huang pill in treatment of large-area cerebral infarction in the elderly patients. *Geriatric Health Care*, 27 (4), 794-817 .
- Zhang, X. (2016). 探讨安宫牛黄丸在治疗中风中脏腑证中的中医辨证疗效分析. *China Prac Med*, 11 (29), 219-220 .
- Zheng, F. _ and Long, D. (2021). Clinical effects of Angong Niu Huang Pills combined with conventional treatment on patients with acute cerebral infarction in recovery period. *Chinese Traditional Patent Medicine*, 43 (2), 381-384 .
- Zhèng, J. (2022). 安宫牛黄丸联合丁苯酞治疗重症脑梗死患者的临床效果. *Chinese Health Care*, 40 (3), 5-6 .